

Documentation Sheet



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Title *Analysis of RF Leakage Radiation from Microwave Oven for Aircraft Interior Applications*

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Abstract

The EM analysis of RF leakage radiation from microwave oven has been carried out in this work using FDTD method. The microwave oven structure is modeled here as rectangular cavity. The RF leakage through the door gap is studied using 3-D FDTD method. It is observed that the wave leaking through door gap is composed of mixed mode. Further, the far-field radiation pattern of microwave oven is computed by combining 2-D FDTD with Green's function. It is found that the RF leakage from microwave oven has a characteristic interference far-field pattern.